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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/963,401	09/27/2001	Pablo Tamayo	19111.0049	9029

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SWIDLER BERLIN SHEREFF FRIEDMAN, LLP
3000 K STREET, NW
BOX IP
WASHINGTON, DC 20007

EXAMINER

AMSBURY, WAYNE P

ART UNIT	PAPER NUMBER
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2171

DATE MAILED: 01/22/2004

8

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/963,401	TAMAYO ET AL.	
	Examiner	Art Unit	
	Wayne Amsbury	2171	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 December 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4,6-11,14,16-21,24,26-31,34,36-40 and 42-48 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4,6-11,14,16-21,24,26-31,34,36-40 and 42-48 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 September 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

CLAIMS 1,4,6-11,14,16-21,24,26-31,34,36-40 AND 42-48 ARE PENDING

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. Applicant's arguments filed 12/17/03 have been fully considered but they are not persuasive.

Applicant fails to provide for a reasonable amount of intelligence on the part of one of ordinary skill in the art. For instance, the argument on page 20 of the response states: "As disclosed by Cooley these two types of web mining [*web content mining* and *web usage mining*] are distinct and Cooley does not disclose or suggest performing web mining that combines the two." This corresponds to: Cooley wants to know **what** and Cooley wants to know **how often** but it is not obvious to one of ordinary skill in the art to ask **what and how often**. This is not persuasive; the combination and other aspects of the Response argument are addressed below in the rejections of the amended claims.

3. Claims 1,4,6-11,14,16-21,24,26-31,34,36-40 and 42-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Simoudis et al (Simoudis), US 5,692,107 in view of Cooley et al (Cooley), Web Mining etc., 1997 IEEE.
11,14,16-21,24,26-31,34,36-40 and 42-48

Simoudis is directed to the generation of predictive models by data mining [TITLE, ABSTRACT, SUMMARY].

As to **claim 1**, “collecting data from a plurality of data sources” corresponds to Simoudis FIG 2 #**200**; at least “integrating the collected data” corresponds to at **202-204**; at least “generating a plurality of data mining models using the collected data” corresponds to steps **205-209**. As to “generating a prediction or recommendation using at least one of the plurality of generated data mining models, in response to a received request for a recommendation or prediction” this is clearly the purpose of creating and saving predictive models, but is made explicit in FIG 3 and its discussion.

Simoudis does not address web mining *per se*, although it falls within the scope of data mining within networks accessed by a GUI as taught by Simoudis [SUMMARY; COL 2 lines 6-15, COL 3 lines 4-14, line 62 and after, and elsewhere]. Cooley is directed to this particular form of data mining [ABSTRACT]. **It would have been obvious** to one of ordinary skill in the art at the time of the invention to provide for the Web as a data mining source because of the explosive growth of information sources available on the Web [Cooley page 558, Introduction].

Simoudis is directed to collecting data from a variety of data sources, including those managed by a DBMS, and sources such as a spreadsheet [COL 4 lines 16-42]. The use of complementary data in Simoudis is discussed at length, as at COL 1 lines 42-63.

Cooley is also directed at integrating data from disparate sources [page 558 RHC] and multilevel and metalevel databases [page 559 RHC], including transactions from usage data and other data that is clearly within the purview of web server data.

These are all web-based data sources and comprise proprietary accounts or user-based data [page 561 RHC and elsewhere]. The discussion of meta- and multi-level databases cited above clearly involves complementary external data. The web usage mining of FIG 1 and elsewhere clearly includes web transaction data and this is discussed in length in **2.2 Web Usage Mining** page 560 and after. The usage pattern analysis involves server access logs [2.2.2], which is clearly web server data. Thus Cooley collects all of the data types specified in claim 1.

As to the integration of the data into a coherent format, it is noted that the Specification of the instant application uses but does not define *coherent* in this context. The target data set of Simoudis is derived from multiple and diverse sources [COL 1 line 64 to COL 2 line 27], which implies that the integrated data is in some coherent format. In Cooley, the knowledge that has been extracted by the mining process can be queried [page 563 LHC bottom to R, and the example query language is SQL-like, which involves coherent tables.

As to **claim 4**, Cooley gathers web traffic data from server logs [page 564 RHC line 3-5].

As to **claim 6**, see steps **203-2006** of FIG 2. As to **claim 7**, clearly Simoudis is implemented in program code.

As to **claim 8**, Cooley is directed to developing models [3. **pattern discovery**, p. 560], and scoring of information and associations [p. 561-562], but does not explicitly state this as "scoring of models." It is considered that the examples cited correspond to models and/or model components.

In the alternative, **it would have been obvious** to one of ordinary skill in the art at the time of the invention to score models in order to select one.

As to **claim 9**, Cooley addresses data cleaning [p. 560 3.1].

The elements of **claims 10-11,14,16-21,24,26-31,34,36-40 and 42-48** are rejected in the analysis above and these claims are rejected on that basis.

4. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wayne Amsbury whose telephone number is 703-305-3828. The examiner can normally be reached on M-TH 7-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic can be reached on 703-308-1436. The fax phone number for the organization where this application or proceeding is assigned is 703-746-7239.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-9700.

WPA


WAYNE AMSBURY
PRIMARY PATENT EXAMINER